

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER			1	2	3	4
LOADING CONDITION			FIGHTER	FIGHTER	FIGHTER	FIGHTER ONE TANK EXTERNAL
GROSS WEIGHT	LBS.		16722	16722	16722	17783
EMPTY WEIGHT - Estimated -	LBS.		13107			
FUEL/OIL	GALS.		300/20	300/20	300/20	450/26
FIXED GUNS/AMMUNITION			6-.50 cal./2400 rds.			
FLEXIBLE GUNS/AMMUNITION			None			
ENGINE POWER USED FOR PERFORMANCE			WAR EMERGENCY	MILITARY	NORMAL	NORMAL
WING LOADING	LBS./SQ.FT.		39.2	39.2	39.2	41.7
POWER LOADING ①	LBS./BHP.		5.2	6.2	7.6	8.1
V-MAX. SEA LEVEL	KN		318	294	273	256
V-MAX. AIRPLANE CRIT. ALT.	KN/FT		413/28000	393/29200	366/30900	340/30400
V-STALL GROSS WEIGHT ②	KN				91.2(67.7)	93.8(72.0)
V-STALL WITHOUT FUEL ②	KN				86.0(58.2)	86.0(59.0)
TIME-TO-CLIMB -10000FT-	MIN.		2.8	3.4	5.2	5.9
TIME-TO-CLIMB -20000FT-	MIN.		5.8	7.2	11.3	13.0
SERVICE CEILING	FT.		•34500	33600	32700	31600
TAKE-OFF DISTANCE -CALM-	FT.				975	1253
TAKE-OFF DISTANCE -15 KN-	FT.				697	911
TAKE-OFF DISTANCE -25 KN-	FT.				541	719
TAKE-OFF TIME	SECONDS					
RATE OF CLIMB -SL-	FT./MIN.		3590	3120	2050	1850
MAX. RANGE/V-AV. ③	N MI./KN				710/174	910/175
BOMBING RADIUS/V-AV -20%R-	NMI/KN					
BOMBING RADIUS/V-AV -33%R-	NMI/KN					
PATROL RADIUS/V-AV -20%R-	NMI/KN					
PATROL RADIUS/V-AV -33%R-	NMI/KN					
SCOUT RADIUS	N MI.					
COMBAT RADIUS	N MI.				45	190
ENGINE / PROP.GEAR RATIO			2 P&W XR2000 - 2 (Turbo) (.178 + .382 gear shift)			
ENGINE RATING BHP/RPM/ALT.	WAR EMERGENCY	MILITARY	NORMAL		TAKE OFF	
	1600/2700/S.L. - 23900'	1350/2700/S.L. - 25500'	1100/2550/S.L. - 27700		1350/2700	
TANKAGE IN GALLONS			OIL	FUEL	OFFENSIVE ARMAMENT	
AUX. FIXED	PROTECTED	26	300	Wings (External)		
	UNPROTECTED			Bombs: 2-500#		
	TOTAL - FIXED INTERNAL	26	300	2-1000#		
	DROPPABLE					
	DROPPABLE - Wing - 1@150		150			
	TOTAL	26	450			
NOTE	① BHP AT MAX. CRIT. ALT.					
	② STALL-WITHOUT POWER (With T.O. power)					
	③ AT 1500 ft. ALTITUDE					

Reissued 1 January 1947

DATE 1 JUNE 1944

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MODEL XF5U-1

6852

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MODEL-XF5U-1

AIRPLANE CHARACTERISTICS & PERFORMANCE

BUREAU OF AERONAUTICS, NAVY DEPT.

COLUMN NUMBER			5			
LOADING CONDITION			BOMBER 2-1000# EXTERNAL			
GROSS WEIGHT	LBS.		18772			
EMPTY WEIGHT	- Estimated - LBS.		13107			
FUEL/OIL	GALS.		300/20			
FIXED GUNS/AMMUNITION			6-.50 cal./2400 rds.			
FLEXIBLE GUNS/AMMUNITION			NONE			
ENGINE POWER USED FOR PERFORMANCE			NORMAL			
WING LOADING	LBS./SQ.FT.		44.0			
POWER LOADING ①	LBS./BHP		8.5			
V-MAX. SEA LEVEL	KN		248			
V-MAX. AIRPLANE CRIT. ALT.	KN/FT		323/30200			
V-STALL. GROSS WEIGHT ②	KN		96.2/75.9			
V-STALL. WITHOUT FUEL ②	KN		91.4/68.4			
TIME-TO-CLIMB -10000 FT.-	MIN.		6.8			
TIME-TO-CLIMB -20000 FT.-	MIN.		15.4			
SERVICE CEILING	FT.		30500			
TAKE-OFF DISTANCE -CALM-	FT.		1590			
TAKE-OFF DISTANCE -15 KN-	FT.		1175			
TAKE-OFF DISTANCE -25KN-	FT.		936			
TAKE-OFF TIME	SECONDS.					
RATE OF CLIMB -SL-	FT./MIN.		1640			
MAX. RANGE / V-AV. ③	NMI/KN		510/177			
BOMBING RADIUS / V-AV -20% R-	NMI/KN.					
BOMBING RADIUS / V-AV -33% R-	NMI/KN.					
PATROL RADIUS / V-AV -20% R-	NMI/KN.					
PATROL RADIUS / V-AV -33% R-	NMI/KN.					
SCOUT RADIUS	NMI.					
COMBAT RADIUS	NMI.					

PERFORMANCE IS BASED ON - CALCULATIONS

RANGE & RADIUS ARE BASED ON ENGINE REQUIREMENT

FUEL CONSUMPTION DATA INCREASED

BY 15 PERCENT TO CONFORM WITH PAST EXPERIENCE.

Practical Combat Radius is based on 20 min. warm up and idling, 1 MIN. T.O., 10 min. rendezvous at 60% normal sea level power (n.s.p.) and auto rich, climb to 15000 ft. at full normal power and auto rich, cruise out at V for max. range and auto lean, drop bombs and unprotected drop tanks, combat for 10 min. at war emergency power plus 10 min. at military power, cruise back at V for max. range and auto lean at 1500 ft.; 60 min. at V for max. range allowed for rendezvous, landing and reserve. Radius includes distance covered in climb but not in descent.

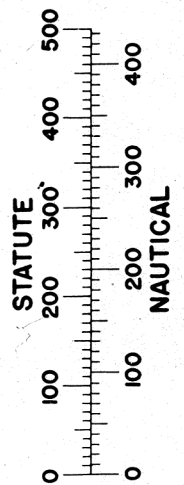
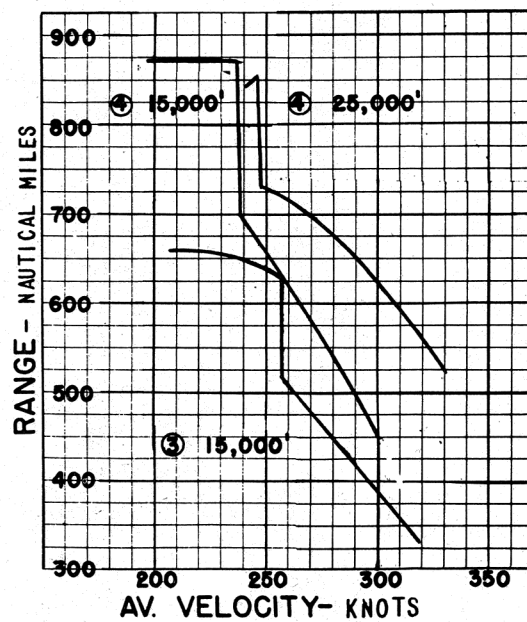
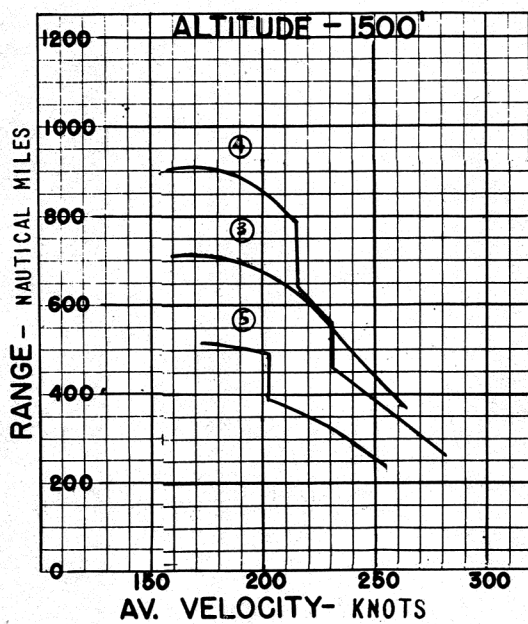
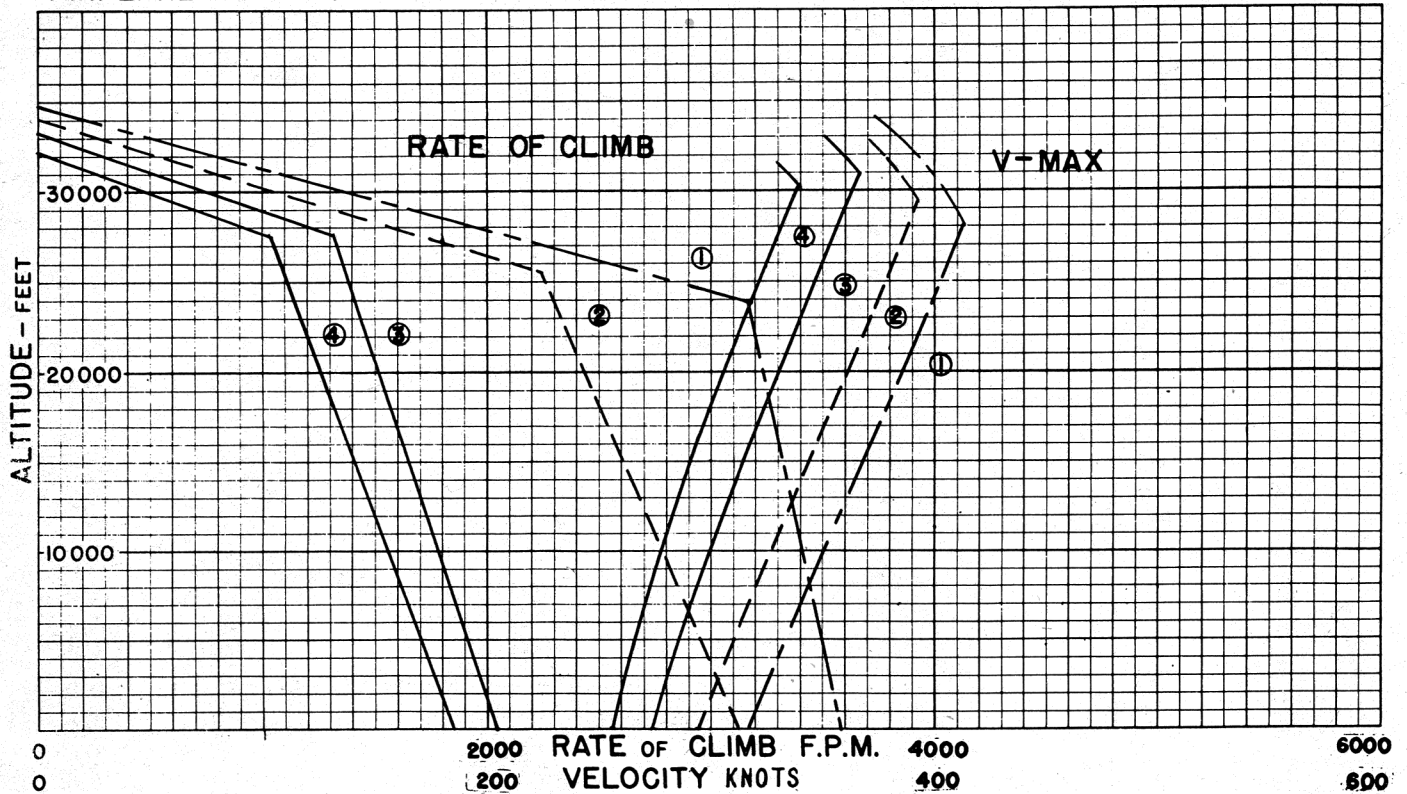
This airplane does not have sufficient fuel to give it a combat radius for the present problem.

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AIRPLANE PERFORMANCE

NAVAER-1335 A

BUREAU OF AERONAUTICS, NAVY DEPT.



○ LOADING CONDITION COLUMN NUMBER

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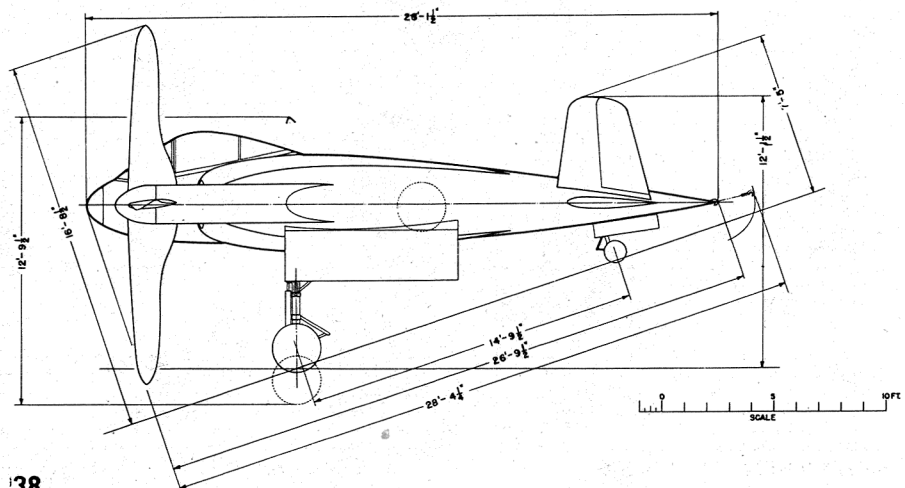
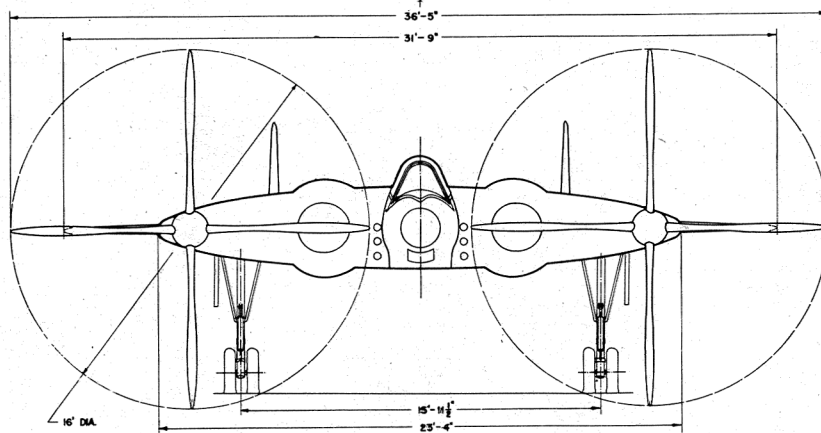
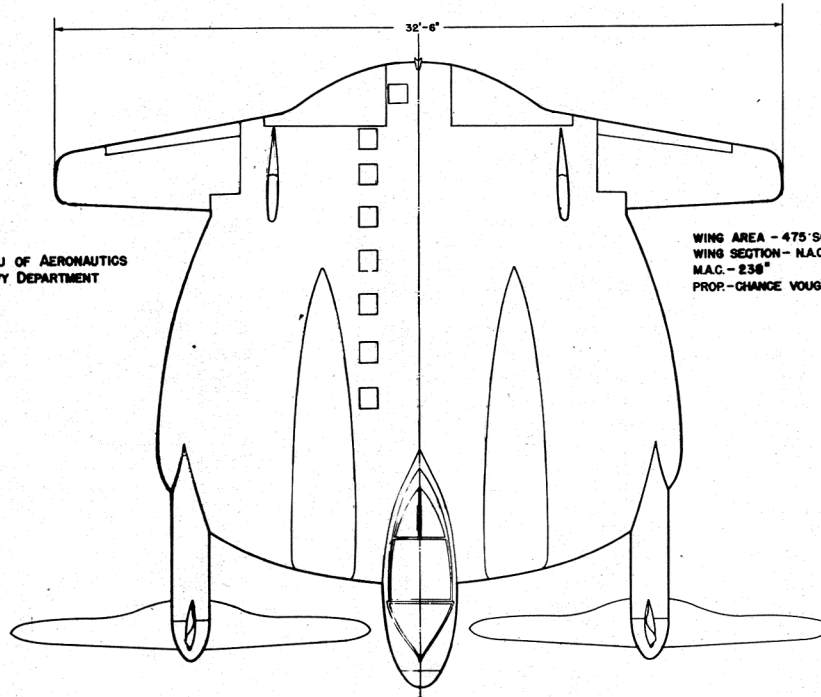
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DESCRIPTIVE ARRANGEMENT

NAVAER
MODEL - XF5U-1

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

WING AREA - 475 SQ. FT.
WING SECTION - NACA 0016
M.A.C. - 238"
PROP. - GANNON VOUGHT DESIGN



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